



Primary Connections Early Stage 1

Staying alive
Needs for survival of people and familiar animals; the senses

RSCAM Ignition Years Curriculum Pack 12

- Identify the basic needs for a human to survive such as air, food, water and shelter
- Identify the basic needs for an animal to survive such as air, food, water and shelter
- Identify the senses and describe how each sense helps us
- Identify similarities in the basic needs of an animal and a human
- Identify differences in the basic needs of an animal and a human
- Use the senses to respond to and describe a stimulus

Northern Territory Curriculum Framework 2009

SI KGP 2 Learners explore objects and events using all their available senses for more extended periods and respond actively.

LL KGP 2

Outcome: Learners recognise the needs and observable features of living things.

Key Indicator: identify their own needs, familiar features of themselves and other living things

Interdependence of living things and their environment

- understand they have basic needs, eg they need food when hungry, water when thirsty and sleep when tired
- identify their basic needs

SI KGP 3 Learners explore, use and respond to changes to objects and events, and indicate preferences based on experiences.

LL KGP 3

Outcome: Learners understand that people are living things that have features and change over time.

Key Indicator: use common terminology to describe common features in themselves, other animals and plants

Interdependence of living things and their environment

- understand living things need air, water, food and shelter to survive
 - recognise themselves as living things
 - recognise other living things, eg cats, dogs, trees, grasses
 - use knowledge of own needs to identify needs of other living things, eg food, shelter, water
- Structure and function**
- identify different groups of living things (KI)
 - understand different senses give them different information
 - identify the parts of the body that they use to sense the world around them, eg eyes for seeing, ears for hearing
 - observe sensing functions of their own body

Primary Connections Stage 2

Plants in action
Needs and life cycle of flowering plants

- Describe the changes to the seed during germination and to the seedling during its growth
- Identify a number of conditions required for plants to grow
- Identify parts of a seedling (eg root, stem, leaves)
- Identify parts of a flower (eg stamens, petals)
- Explain the role of roots, stems, leaves, flowers and fruits
- Explain the relationships between the stages of processes in the plant life cycle

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SI KGP Band 1 Learners describe some ways that scientific activities affect their community. They focus on a problem using a familiar situation, responding to teachers' suggestions to carry out simple activities that require observation and sharing of observations.

LL Band 1

Outcome: Learners recognise different living things and know some of their needs, features and functions. They are aware that living things grow and change over time.

Key Indicator: describe some ways that living things rely on the environment and each other

Key Indicator: describe the function of common body parts in themselves, other animals, and plants

Key Indicator: describe some changes that take place as living things grow

Interdependence of living things and their environment

- understand plants need light and water and different plants grow in different places
- investigate different plants in terms of the different places they are found

Structure and function

- understand the different parts of plants have different purposes
- identify different parts of a plant and their functions

Reproduction and change

- understand all living things grow
- understand some living things go through stages and change over time, eg seeds grow into plants
- investigate the life cycle of different living things, eg plants

SI Band 2 Learners explore and engage with science in their interests and activities within and beyond school. They collaboratively plan, conduct and report on investigations related to their questions about living and non-living things and events. Learners begin to understand that in a fair test there are variables and the investigator only changes one of these to get an answer to their question they follow instructions, collecting and making limited records of their findings, saying whether or not what happened was expected.

LL Band 2

Outcome: Learners understand that needs, features and functions of living things are related and change over time.

Key Indicator: Explain why a familiar living thing may not survive if its environment changes using information about its features and needs

Key Indicator: Describe similarities and difference in growth and reproduction of groups of familiar living things, recognising that offspring have similar features to the parents

Structure and function

- understand the observable features and behaviour of living things is related to their needs
 - understand living things have structures or features that carry out life processes, eg plants have leaves for making food
 - describe the observable features of a root system that allow it to gather water from the soil
 - classify seed-producing plants such as flowering and non-flowering plants from their local communities
- Reproduction and change**
- understand that things reproduce and some reproduce and grow in similar ways
 - explain that some plants produce seeds that when germinated, grow in similar patterns

Key

SI = Science as Inquiry

LL = Live and Living Science strand

Coloured text = Learners know and understand that...

Black text = Learners are able to...

RSCAM = Remote Schools Curriculum and Assessment Materials

Learning Links portal: <https://portal.ntschoools.net/sites/LearningLinks/default.aspx>

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Primary Connections Stage 1

Schoolyard safari

Features, habitats and behaviour of small invertebrates

RSCAM Early Primary Curriculum Pack 3

- Identify parts of a small animal used for movement, feeding and protection
- Identify conditions of a small animal's habitat, for example moist, cool, dry or hot
- Identify and describe the behaviour of small animals in particular habitats
- Compare the structural features of two small animals
- Compare the habitats of different small animals
- Identify the habitat conditions needed for the survival of a particular small animal

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SI KGP Band 1 Learners describe some ways that scientific activities affect their community. They focus on a problem using a familiar situation, responding to teachers' suggestions to carry out simple activities that require observation and sharing of observations.

LL Band 1

Outcome: Learners recognise different living things and know some of their needs, features and functions. They are aware that living things grow and change over time.

Key Indicator: describe some ways that living things rely on the environment and each other

Key Indicator: describe the function of common body parts in themselves, other animals and plants and how they help organisms obtain their needs

Interdependence of living things and their environment

- understand living things have different needs for their survival, eg some things live in water, or land: some eat plants or other animals
- understand in any particular environment some animals and plants thrive, some don't live as well and some do not survive
- investigate different animals in terms of the habitat, food, shelter

Structure and function

- understand the features of living things help them to survive, eg a bird has wings to fly, a fish has fins to swim
- explore the relationships between the features of living things and how they move

SI Band 2 Learners explore and engage with science in their interests and activities within and beyond school.

They collaboratively plan, conduct and report on investigations related to their questions about living and non-living things and events. Learners begin to understand that in a fair test there are variables and the investigator only changes one of these to get an answer to their question they follow instructions, collecting and making limited records of their findings, saying whether or not what happened was expected.

LL Band 2

Outcome: Learners understand that needs, features and functions of living things are related and change over time. They can make connections between the features of living things and the changes that occur as things grow and age or if their needs are not met.

Key Indicator: explain why a familiar living thing may not survive if its environment changes using information about its features and needs

Structure and function

- understand the observable features and behaviour of living things related to their needs
- compare structures, eg fish have fins and ants have legs

Primary Connections Stage 3

Marvellous micro-organisms

Characteristics, needs and uses of micro-organisms (eg, yeast and mould)

- Explain that yeast obtains energy when it breaks down sugars, a process that releases a gas (carbon dioxide)
- Explain that yeast grows faster at warm temperatures than when it is cold or hot
- Explain that the gas produced by yeast forms pockets of gas in the dough and this makes bread rise
- Describe the conditions that affect the growth of mould on food
- Explain that the pockets of gas made by yeast in bread dough expand when heated in cooking, making the bread light

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SI Band 3 Learners apply their scientific understanding to make sense of their day-to-day experiences and interests. They are aware of the need for fair testing and the need to get more than one set of results in order to test their simple predictions (not guesses). They collect and organise numerical data and descriptive information using simple tables, diagrams and graphs; and identify main features, patterns and difficulties in the investigation.

LL Band 3

Outcome: Learners understand that living things can be made up of systems which determine their interaction with the environment. They explore similarities and differences between living things and can group them according to their observable features.

Key Indicator: explain some interactions between living things and their environment

Interdependence of living things and their environment

- understand connections exist between living things and their environments
- investigate how living things are dependent on the non-living environment, nutrients for plant growth
- investigate how some animals and plants respond to their environment and change their behaviour based on the weather, season, food supply, eg alates (winged termites) respond to first early rains of wet season, dragon flies respond to first signs of dry season

Structure and function

- explain the relationship between the structures of living things and the functions these structures perform (KI)
- understand different living things (yeast) have different features to live in different habitats
- compare the features of different living things (yeast) and relate these to how they survive and interact with their environment

SI Band 4 Learners consider the impact of applications of science and technology on themselves, society and the environment. They plan and conduct different types of investigations, taking account of the main variables; collect data using repeat trials or replicates; present data in appropriate formats, interpret patterns in data or information prepared in different formats; and make general suggestions for improving the investigation.

LL Band 4

Outcome: Learners understand that systems can interact and that these interactions can lead to change. They begin to get a scientific understanding of living things and can now understand more abstract concepts, such as cells which are too small to see with the naked eye. They use models and diagrams to describe interactions between different living things, between parts of living things in systems and to describe changes over time.

Key Indicator: construct and interpret food chains and webs to model relationships between organisms within an ecosystem

Key Indicator: explain how the survival of organisms within a particular environment is dependent on their suitability to that environment

Interdependence of living things and their environment

- understand ecosystems consist of biotic (living) and abiotic (non-living) factors
- understand that fungi are living things and are decomposers
- use models to explain how changing one aspect can impact on other organisms

Structure and function

- understand all living things are made up of cells and that fungi are single celled (unicellular)
- investigate basic cell structure